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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,461	11/20/2003	Francois Kubica	245494US41X DIV	6844
22850	7590	04/07/2006		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER BEHNCKE, CHRISTINE M	
			ART UNIT 3661	PAPER NUMBER
DATE MAILED: 04/07/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/716,461

Applicant(s)

KUBICA, FRANCOIS

Examiner

Christine M. Behncke

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3, 7-11, 13, 26 and 28-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7-11, 13, 26, and 28-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2005 and 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/863894.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is in response to the Amendment and Remarks filed 19 January 2006, in which claims 1, 3, 7-11, 13, 26, and 28-30 were presented for examination.

#### ***Response to Arguments***

Regarding the note that reference AO listed on IDS submitted March 2, 2005 has not been initialed as considered, the Examiner respectfully refers applicant to the PTO-1449 mailed 9/20/2005, mailed with the previous Advisory Action (9/20/2005), and made available on Public PAIR IFW under the Mail Room Date 09-20-2005. Reference AO was initialed as considered.

Applicant's arguments filed 19 January 2006 have been fully considered but they are not persuasive. Applicant contends the applied prior art does not disclose or teach "transmitting automatic pilot instructions over a dedicated communication link". It is noted that Applicant does not provide specific paragraphs in the specification for support of this amended portion. The Examiner interprets "a dedicated communication link" to refer to links 18 shown in Figure 3, wherein links 18 transmits the automatic pilot instructions from the navigation computer directly to the flight control computer (Page 6, lines 3-13). Applicant contends that the applied reference Pages "does not transmit automatic pilot instructions from one computer to another computer". The Examiner respectfully disagrees. In figure 4 of Pages, computer 12 transmits information to PA 13 over the illustrated link (Column 5, lines 43-46).

#### ***Claim Rejections - 35 USC § 103***

Art Unit: 3661

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6-13, 16, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pages, US Patent No. 5,774,818, in view of Trikha, US Patent No. 6,003,811.

2. **(Claims 1 and 13)** Pages discloses a method for operating an aircraft, comprising the steps of: receiving guidance instructions and guidance parameters at a navigation computer (computer 12, Column 5, lines 26-35); transmitting automatic pilot instructions from said navigation computer to a flight control computer (PA 13, Column 5, lines 43-46) over a dedicated communication link (figure 4); receiving control instructions and said automatic pilot instructions at said flight control computer (Column 5, lines 43-46). Pages discloses computing a plurality of operating commands at the flight control computer but does not explicitly disclose wherein a first plurality or a second plurality of operating commands are generated specifically in automatic or manual modes.

3. However, Trikha teaches in the prior art in an automatic pilot mode, generating a first plurality of operating commands based on the automatic instructions at said flight control computer; in manual mode, generating a second plurality of operating commands based on the control instructions at the flight control computer (Column 3, lines 17-25).

4. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Pages with the teachings of Trikha to illustrate the principle components of a fly-by-wire aircraft control system wherein the flight control computer generates the operating commands based on the automatic pilot instructions of the manual instructions of the pilot.

5. **(Claim 3)** Pages, in view of Trikha, discloses the method previously discussed, Pages further discloses the step of receiving control parameters at the flight control computer (figure 4, Column 5, lines 26-46)

6. **(Claim 7)** Pages further discloses wherein the step of generating the automatic pilot instructions at the navigation computer based on the guidance instructions and on guidance parameters (Column 5, lines 26-35).

7. **(Claim 8)** Pages in view of Trikha discloses the method previously discussed, both Pages and Trikha further teach wherein the automatic pilot instructions correspond in nature to the control instructions (Pages: Column 5, lines 12-17; Trikha: Column 3, lines 7-24).

8. **(Claims 9-11)** Pages in view of Trikha discloses the method previously discussed; Pages and Trikha teach the transmitted automatic/control instructions include desired change in the aircraft's flight path (Pages: Column 5, lines 43-46; Trikha: Column 3, lines 7-24). It is well known in the art that the parameters corresponding to a vertical load factor, roll rate, and yaw are specifically used to designate and change the flight path. These parameters are essential in order to

correctly control the aircraft controlled surfaces and calculate the needed corrections to change the aircraft's flight path.

9. **(Claim 26)** Pages further discloses wherein the step of receiving control parameters at said flight control computer comprises receiving said control parameters via an input different from both an input through which said control instructions are received and an input through which said automatic pilot instructions are received (figure 4, Column 5, lines 47-52).

10. **(Claim 28)** Pages further discloses comprising the step of transmitting said first plurality of operating commands from said flight control computer to a plurality of control surfaces (Column 5, lines 47-52).

11. **(Claim 29)** Pages further discloses comprising the step of receiving inertial information at said navigation computer (Column 1, lines 39-52 and Column 5, lines 47-55).

12. **(Claim 30)** Pages further suggests wherein a delay between a time at which said inertial information is received at said navigation computer and a time at which said first plurality of operating commands is transmitted from said flight control computer to said plurality of control surfaces is minimized (figure 4, Column 1, lines 39-52 and Column 5, lines 47-55).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

03-25-2006

  
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